



BIODIVERSITY NET GAIN ASSESSMENT

OAK LEA, OSBALDESTON, BB2 7LT

JUNE 2025



Biodiversity Net Gain Assessment

Oak Lea, Osbaldeston, BB2 7LT

A report for

Leehand Limited

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A report by

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EXECUTIVE SUMMARY

PENNINE Ecological were commissioned to undertake an ecological assessment of Oak Lea, Osbaldeston, Lancashire, BB2 7LT. The assessment is required to support an application to demolish the existing dwelling and rebuild a new dwelling.

The assessment includes the use of Natural England's/Defra's Statutory Biodiversity Metric Calculation Tool (version 1.0.3 published in July 2024) to determine whether the proposals would result in a biodiversity net gain or loss. The assessment was completed using standard methodologies and there was no deviation from the recognised guidance.

The baseline habitats recorded on site are of medium to very low distinctiveness and have a total habitat value of 0.95 habitat units. The medium distinctiveness habitats (trees) will be retained. The total number of habitat units lost (before mitigation) is 0.32.

As the site is a residential development, the proposed habitats include developed land and vegetated garden, split to a 70:30 ratio. There are no opportunities to enhance the sites habitats due to the site being within private curtilage.

The proposal will result in a – 24.22 % / - 0.23 habitat unit loss. The proposals will also result in a 0% change for hedgerow units (i.e. less than the +10% requirement). The Habitat Trading Rules have not been satisfied.

	Habitat Units	Habitat Units % Change	Hedgerow Units	Hedgerow Units % Change
On-site Baseline	0.95	-	0.35	
On-site Post-intervention	0.72	-	0.35	
On-site Net Change	- 0.23	- 24.22 %	0	0 %
Trading Rules Satisfied	No		No	

In order for the proposal to achieve 10% net gain, 0.32 habitat units and 0.03 hedgerow units are required.

The applicant proposes to deliver the remaining net gains through purchasing off-site habitat units from a habitat bank.

1. INTRODUCTION

1.1 BACKGROUND

PENNINE Ecological were commissioned to undertake an ecological assessment of Oak Lea, Osbaldeston, Lancashire, BB2 7LT (hereafter referred to as 'the site'). Appendix A, Figure 1 provides the site's red line application boundary and the results of the UKHabs survey.

To date, a Preliminary Ecological Appraisal (PEA) and bat activity surveys have been undertaken to support an application to demolish the existing residential bungalow and replace with a new residential property.

1.2 PURPOSE OF THIS REPORT AND BNG BACKGROUND

As of 12th February 2024 Biodiversity Net Gain (BNG) became mandatory (unless exempt) under Schedule 7A of the Town and Country Planning Act 1990 (as inserted by Schedule 14 of the Environment Act 2021). Developers must deliver a BNG of 10% unless otherwise agreed with the relevant Local Authority.

The PEA identified the requirement for a BNG assessment at this site due to the anticipated loss of low distinctiveness habitats. The BNG assessment has been undertaken to determine whether or not the proposal demonstrates an overall net gain or loss of biodiversity, in line with the current National Planning Policy Framework, 2021.

Through site selection and layout, applicants should avoid or reduce any negative impact on biodiversity. They must deliver at least 10% BNG (unless agreed otherwise with the Local Authority), as measured by the statutory biodiversity metric. There are three ways an applicant can achieve BNG.

1. They can create biodiversity on-site (within the red line boundary of a proposal site).
2. If the applicant cannot achieve all of their BNG on-site, they can deliver through a mixture of on-site and off-site. Applicants can either make off-site biodiversity gains on their own land outside the proposal site, or buy off-site biodiversity units on the market.

3. If the applicant cannot achieve on or off-site BNG, they must buy statutory biodiversity credits from the government. This should be a last resort. The government will use the revenue to invest in habitat creation in England.

1.3 SITE LOCATION

The site is Oak Lea, Osbaldeston, BB2 7LT. The sites central National Grid Reference is SD 64837 32106.

The site is located approximately 5.2km to the north of Blackburn town centre. The site is in a semi-rural landscape within a small village with a cluster of detached properties and associated gardens. The village is surrounded by agricultural landscape.

The site is situated within the Ribble Valley Borough Council and within the National Character Area 35 – Lancashire Valleys.

2. METHODOLOGY

2.1 UK HABITAT CLASSIFICATION BASELINE SURVEY

For a BNG assessment to be completed, a UK Habitat Classification (UKHabs) Survey (UKHab Ltd, 2023) has to be undertaken of the site's baseline habitats. The UKHabs survey, and habitat condition assessments were undertaken by Robert Leatham who is a highly proficient botanist (refer to Section 2.3) in March 2025. This BNG assessment has been undertaken by Patrick Leatham (refer to Section 2.3).

2.2 BIODIVERSITY METRIC CALCULATOR TOOL

All habitats recorded within the footprint of the site during the field survey were included in the Biodiversity Metric Calculation Tool (version 1.0.3 published in July 2024). The statutory biodiversity metric is a way of measuring biodiversity value for the purposes of BNG.

This metric calculation has been undertaken following the standard methodology (Natural England, 2024) and in accordance with CIEEM good practice guidelines (CIEEM, 2019).

2.3 SURVEYOR EXPERIENCE

The botanical surveys and assessment were undertaken by Robert Leatham, a highly experienced ecological consultant and surveyor with approximately 30 years' experience in a wide range of ecological survey and assessment.

Key skills relating to this assessment include the following;

- Extended Phase 1 Habitat Survey and National Vegetation Classification Survey.
- Highly proficient field botanist, including some difficult plant groups.

The BNG assessment has been undertaken by Patrick Leatham, who is a Full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM) and has over 13 years' experience in land management, ecological survey and evaluation.

Patrick's key skills relating to BNG include:

- Over 13 years completing Extended Phase 1 Habitat Survey / UKHabs Survey on both small planning applications and Nationally Significant Infrastructure Projects (NSIPs).
- Over three years' experience undertaking and reviewing BNG assessments for small and large planning applications.

2.4 LIMITATIONS

The field survey was undertaken in March 2025. Whilst this is not considered to be within the optimal habitat survey window, the habitats on site are heavily modified and formalised and could be easily identified and condition assessed (where applicable). There are considered to be no constraints to this assessment.

3. BIODIVERSITY NET GAIN ASSESSMENT RESULTS

The following section details the baseline habitats, along with habitats to be created, enhanced and retained within the site (where applicable).

3.1 ON-SITE HABITAT BASELINE RESULTS

The habitats recorded on site were of the following distinctiveness’;

- Medium - urban tree.
- Low – vegetated garden, modified grassland.
- Very low – Developed land (building and hard standing).

In total, the baseline habitats surveyed have a total habitat value of 0.95 habitat units.

A summary of the baseline habitat information is shown in Table 3.1 below.

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Table 3-1: Summary of the Baseline Habitats and Habitat Value

Broad Habitat	Habitat Type	Habitat Area (ha)	Distinctiveness	Condition	Total Habitat Units (Ecological Baseline)	Area Retained – ha / units	Area Enhanced – ha / units	Habitat Area (ha) Lost	Units Lost (before mitigation)
Grassland	Modified grassland	0.1448	Low	Poor	0.32		0.00	0.14	0.32
Urban	Vegetated garden	0.0738	Low	Condition Assessment N/A	0.16	0.0738	0.00	0.00	0.00
Urban	Developed land; sealed surface	0.0345	V. Low	N/A - Other	0.00	0.0345	0.00	0.00	0.00
Individual trees	Urban tree	0.0041	Medium	Moderate	0.04	0.0041	0.00	0.00	0.00
Individual trees	Urban tree	0.0326	Medium	Good	0.43	0.0326	0.00	0.00	0.00
TOTAL		0.25*			0.95	0.11*			0.32

*Excludes individual trees as this area is calculated by the canopy biomass and not footprint.

3.2 ON-SITE HABITAT CREATED RESULTS

The habitats to be created on site (Table 3.2) are of the following distinctiveness’:

- Low – Vegetated garden.
- Very low; Developed land; sealed surface.

The total number of habitat units delivered is 0.09.

The habitats and their respective areas, distinctiveness, condition etc. are included in Table 3.2 below.

Table 3-2: Summary of the On-Site Habitat Creation and Habitat Value

Broad Habitat	Habitat	Habitat Area (ha)	Distinctiveness	Condition	Habitat Units Delivered
Urban	Developed land; sealed surface	0.098	V.Low	N/A	0.00
Urban	Vegetated garden	0.042	Low	N/A	0.09
TOTAL		0.14 (plus 0.11 retained) = 0.25*			0.09

**Excludes individual trees as this area is calculated by the canopy biomass and not footprint.*

3.3 ON-SITE HEDGEROW BASELINE RESULTS

Hedgerows are situated along the north and west boundaries of the site. These comprise an ornamental hedgerow section, a species rich hedgerow section and two species poor hedgerow sections. None of the hedgerows will be affected by the proposals.

3.4 ON-SITE HEDGEROW CREATION RESULTS

Given the site is a residential development, there are no opportunities to create hedgerows within the site.

4. CONCLUSION

4.1 CONCLUSION AND BNG ASSESSMENT RESULTS

The following section summarises the Biodiversity Net Gain assessment results.

Baseline habitats of very low, low and medium distinctiveness were assessed as being present within the site in March 2025.

The proposal design has ensured the mitigation hierarchy has been followed. Consultation with Pennine ecological has been ongoing throughout the design stage to minimise impacts to biodiversity.

- Avoiding impacts on notable habitats: All trees and hedgerows on the site have been retained. There are no habitats of any notable value that will be lost (i.e. all of low or very low distinctiveness).
- Minimise impacts on site: As above. The trees are of medium distinctiveness and will be retained. The remainder of the site will remain consistent with current site conditions (i.e. developed land and vegetated garden).
- Restoring habitats on site: N/a. The proposals are for a new residential dwellings within the existing residential curtilage. There are no habitats to restore.

Due to the rules stated within 'The Statutory Biodiversity Metric User Guide', any habitats which are proposed within private curtilage cannot be counted towards the net gain on site:

Private gardens

A private garden is a garden within the curtilage of a privately owned or tenanted dwelling house. Private gardens can contain important features for biodiversity, including mature trees and hedgerows.

When recording habitats at baseline within a private garden you may need to assess any important features as individual habitat parcels to avoid under-recording biodiversity. This may include:

- recording individual trees
- recording hedgerows
- recording other habitats, such as ponds

[See more about which individual trees to record at baseline within private gardens.](#)

The post-development private garden has no public access, and biodiversity net gains cannot be legally secured. As these gains cannot be secured you should only record created private gardens as either:

- 'urban – vegetated garden'; or
- 'urban - unvegetated garden'

You should not:

- record the creation of any other new habitats within private gardens
- record enhancement of any habitat within private gardens

As there are no opportunities to deliver compensation on site, the proposal will result in a – 24.22 % / - 0.23 unit loss. Although all hedgerows are being retained, there is no opportunity to enhance the hedgerows and therefore the 10% uplift on the baseline cannot be achieved within the site. The proposal will result in a 0% change for hedgerow units (i.e. less than the +10% requirement).

The habitat trading rules have not been satisfied (see Tables 4.1 and 4.2 below).

Table 4.1: Summary of the Biodiversity Net Gain Results

	Habitat Units	Habitat Units % Change	Hedgerow Units	Hedgerow Units % Change
On-site Baseline	0.95	-	0.35	
On-site Post-intervention	0.72	-	0.35	
On-site Net Change	- 0.23	- 24.22 %	0	0 %
Trading Rules Satisfied	No		No	

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Table 4.2: Extract of BNG Headline Results

On-site baseline	<i>Habitat units</i>	0.95		
	<i>Hedgerow units</i>	0.35		
	<i>Watercourse units</i>	0.00		
On-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	0.12		
	<i>Hedgerow units</i>	0.35		
	<i>Watercourse units</i>	0.00		
On-site net change <small>(units & percentage)</small>	<i>Habitat units</i>	-0.23	-24.22%	On-site net gain is less than target set ▲
	<i>Hedgerow units</i>	0.00	0.00%	On-site net gain is less than target set ▲
	<i>Watercourse units</i>	0.00	0.00%	
Off-site baseline	<i>Habitat units</i>	0.00		
	<i>Hedgerow units</i>	0.00		
	<i>Watercourse units</i>	0.00		
Off-site post-intervention <small>(Including habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	0.00		
	<i>Hedgerow units</i>	0.00		
	<i>Watercourse units</i>	0.00		
Off-site net change <small>(units & percentage)</small>	<i>Habitat units</i>	0.00	0.00%	
	<i>Hedgerow units</i>	0.00	0.00%	
	<i>Watercourse units</i>	0.00	0.00%	
Combined net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-0.23		
	<i>Hedgerow units</i>	0.00		
	<i>Watercourse units</i>	0.00		
Spatial risk multiplier (SRM) deductions	<i>Habitat units</i>	0.00		
	<i>Hedgerow units</i>	0.00		
	<i>Watercourse units</i>	0.00		
FINAL RESULTS				
Total net unit change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-0.23		
	<i>Hedgerow units</i>	0.00		
	<i>Watercourse units</i>	0.00		
Total net % change <small>(Including all on-site & off-site habitat retention, creation & enhancement)</small>	<i>Habitat units</i>	-24.22%		Total net gain achieved is less than target set ▲
	<i>Hedgerow units</i>	0.00%		Total net gain achieved is less than target set ▲
	<i>Watercourse units</i>	0.00%		
Trading rules satisfied?	No - Check Trading Summaries ▲			
Unit Type	Target	Baseline Units	Units Required	Unit Deficit
<i>Habitat units</i>	10.00%	0.95	1.04	0.32
<i>Hedgerow units</i>	10.00%	0.35	0.38	0.03
<i>Watercourse units</i>	10.00%	0.00	0.00	0.00
				No additional watercourse units required to meet target ✓

5. BNG PROPOSALS

In order for the proposal to achieve 10% net gain, 0.32 habitat units and 0.03 hedgerow units are required.

The applicant proposes to deliver the remaining net gains through purchasing off-site habitat units from a habitat bank.

5.1 POTENTIAL OFF-SITE LOCATIONS

A review of <https://www.futurehomes.org.uk/biodiversityunitfindermap> has been undertaken to identify potential nearby receptor sites.

Note – Future homes has not verified the accuracy of any of this information. The locations in the map are approximate only. Therefore this information should be used as a guide only, to assist in finding a habitat bank.

Note - if the habitat bank is located outside of the Local Planning Authority (LPA) or National Character Area (NCA) of the site, then a spatial risk multiplier¹ is applied to the habitat unit deficit.

There are no available habitat banks within the same LPA or NCA.

The nearest pending habitat banks are as follows:

(i) Habitat Bank Option 1 (Pending):

Organisation: Legacy Habitat Banks Ltd.

Site ID: A228

Address: Barnoldswick, BB18 5SG

Local Planning Authority (LPA): Pendle District Council

National Character Area (NCA): 35 – Lancashire Valleys

¹ Refer to Page 35 of the Statutory Metric User Guide for details on Spatial Risk Multipliers - https://assets.publishing.service.gov.uk/media/669e45fba3c2a28abb50d426/The_Statutory_Biodiversity_Metric_-_User_Guide_23.07.24_.pdf

This habitat bank is outside of the proposal sites LPA but within the same NCA.

(ii) Habitat Bank Option 2 (Pending):

Organisation: TBC.

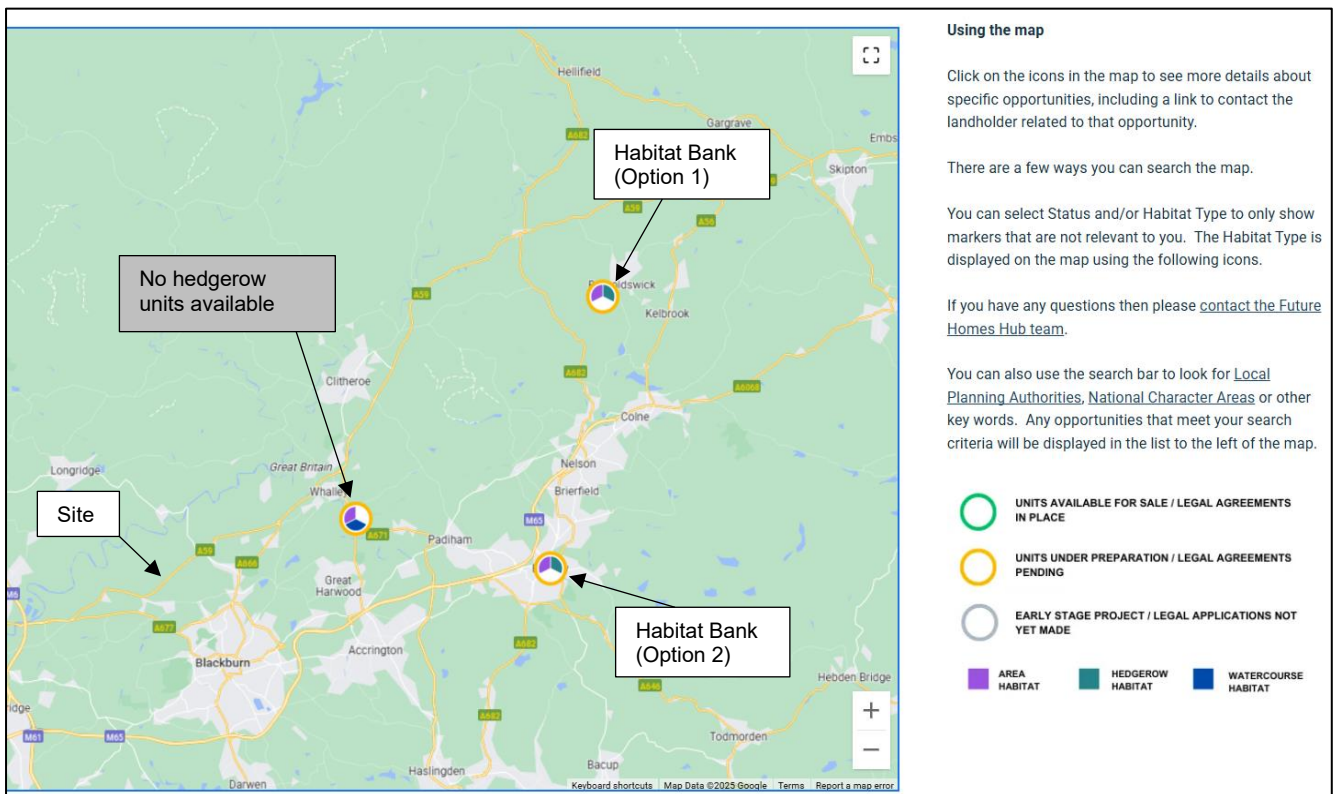
Site ID: A092

Address: Not Provided

Local Planning Authority (LPA): Burnley Council

National Character Area (NCA): 35 – Lancashire Valleys

This habitat bank is not within the proposal sites LPA but is within the same NCA.



REFERENCES

CIEEM (2019). *Biodiversity net gain. Good practice principles for development; a practical guide*. CIRIA publications

Natural England (2024). The Statutory Biodiversity Metric - User Guide. Last updated: July 2024

PENNINE ecological (2025). *Preliminary Ecological Appraisal – Land at: Oak Lea, Osbaldeston Lane, Osbaldeston, BB2 7LT*

UKHabs Ltd (2023). *UK Habitat Classification Version 2.0* (at <https://www.ukhab.org>)

Appendix A - Figures

Figure 1: Baseline Habitats Map (Scale – 1:330)



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Figure 2: Proposed Site Plan (Rural Solutions, 2025 - Drawing No: 5015-000-03) Scale: 1:1250

